TRANS TECH CONSULTANTS
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FEASIBILITY STUDY
DOMESTIC WELL CONTAMINATION

PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA
(SCDHS-EHD Site # 00001115; NCRWQCB Site #1TSO641)

Prepared for:
Mr. Lee Smith
P. O. Box1755
Sebastopol, California 95472

Prepared by:
Trans Tech Consultants
930 Shiloh Road, Bld. 44, Ste. J
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(707) 575-8622

Job No. 1301.01
October 2005

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Staff Geologist

Bill C. Wiggins, PE
Registered Civil Engineer

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WILLIAM CLYDE WIGGINS
No. CE46344
Exp. 12-31-06
CIVIL
STATE OF CALIFORNIA

TABLE OF CONTENTS

DISTRIBUTION LIST:

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Division of Environmental Health
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Santa Rosa, California 95403

North Coast Regional Water
Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

INTRODUCTION

This report presents Trans Tech Consultants (TTC) feasibility study to remediate the impact to groundwater from methyl tert-butyl ether (MtBE) in the domestic well located at 6140 Sebastopol Road (DW-6140). The purpose of this report is to summarize the data obtained to date and to evaluate the technical and economic feasibility of various approaches to corrective action. The information and technical approaches to corrective action presented in this report are based on our understanding of site conditions gained from previous subsurface investigations.

BACKGROUND

Site Description

The site is located in western Sonoma County, approximately ½ mile east of Sebastopol on Sebastopol Road (Highway 12), along the eastern edge of the Laguna de Santa Rosa. Groundwater depth varies from approximately 5 feet in the summer and fall to near surface levels during periods of high groundwater in the winter and spring. The site has offices, a service garage, a parking area, and a heavy equipment storage yard. The predominant ground cover is gravel and asphalt. There are also two mobile buildings on the site used as office/storage space. The site is bordered to the east and west by other commercial/industrial sites, to the south by Highway 12, and to the north by undeveloped land. The site is approximately located as shown on the attached Site Location Map, Plate 1.

Local Geology and Hydrogeology

The subject site is located within the Santa Rosa Valley which forms a northwest-trending structural depression in the southern part of the Coast Ranges. Published geologic data reviewed indicates the site is underlain by Quarternary-aged alluvial deposits consisting of poorly sorted coarse sands and gravels, and moderately sorted fine sand, silt, and clay. Underlying the alluvial deposits is the Pliocene-aged Merced (Wilson Grove) Formation, consisting of marine deposits of fine sands and sandstone, but has thin interbeds of clay and silty-clay, some lenses of gravel, and localized fossils.

The site is located within the western margins of the Santa Rosa Plain sub-basin, of which, the Merced Formation is the main water- bearing unit. The site is bordered approximately 1/4 mile to the north by the Laguna de Santa Rosa which flows northerly discharging into the Russian River.

Boring logs from the site indicate that shallow stratigraphy is generally characterized by silty clays underlain by silty sands. In general, calculated groundwater level flow directions at the site vary from northwesterly to southwesterly. Calculated groundwater level measurements indicate a mean gradient of 0.01 feet per foot. Depth to groundwater levels range from 0.50 foot to approximately 8 feet bgs with an average level between 1 to 3 feet bgs.

Previous Site Activities

It is our understanding that in August 1996, one 10,000-gallon UST (T-1) and one 6,500-gallon UST (T-2) were removed from a common excavation, and one 2,000-gallon (T-3) and one 350-gallon UST (T-4) were

removed from a second common excavation. The approximate locations of the former USTs are shown on the attached Site Plan, Plate 2. The tank removal was reportedly performed by John's Excavating of Santa Rosa, California. T-1 and T-2 reportedly stored diesel, while T-3 and T-4 reportedly stored gasoline and waste oil, respectively. Soil and groundwater samples were taken from the excavations, reportedly under the observation of representatives of the SCDHS-EHD. A fuel release investigation was required and work has progressed under the oversight of the SCDHS-EHD and North Coast Regional Water Quality Control Board.

On September 11, 2000, three soil borings were advanced and completed as groundwater monitoring wells MW-1, MW-2, and MW-3. The approximate well locations are shown on Plate 2. The results of this investigation were presented in our December 21, 2000 *Summary Report.*

Additional investigations on February 4 and 5, 2002 included the installation of monitoring wells MW-4 through MW7 and the advancement of three soil borings, SB-1 through SB-3. On February 11, 2002, seven soil borings, SB-4 through SB-10 were drilled. The results of the investigation were presented in our April 9, 2002 *Summary Report/Quarterly Monitoring Report.*

On July 25, 2003, Gregg In Situ, Inc., of Martinez, California, performed two cone penetration tests (CPTs) at the approximate locations shown on Plate 2. The CPTs were performed to further define the subsurface lithology and to collect groundwater samples for delineation of the vertical extent of groundwater impact. In addition , soil borings SB-11 through SB-13 were drilled. The results of the analyses were presented in our December 24, 2003 *Report of Investigation.*

During July and October 2004, soil excavation / site remediation activities were performed. Soil impacted with petroleum hydrocarbons was excavated in the near vicinity of the former tank locations. Monitoring well MW-3 was subsequently removed under permit and approximately 3,600 tons of impacted soil was removed. The results of this investigation were presented in our November 12, 2004 *Report of Excavation Activities.*

The onsite monitoring wells and the two offsite domestic wells have been regularly monitored during the course of the investigation. The results have been submitted in ongoing quarterly monitoring reports.

Results of Chemical Analysis - Domestic Well DW-6140

The historical laboratory analytical results for groundwater samples collected from well DW-6140 during our previous quarterly monitoring events are presented below in units of micrograms per liter (µg/L). Goundwater samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline, TPH as diesel, the volatile organic compounds; benzene, toluene, ethyl benzene, and xylenes (BTEX), the additional oxygenated fuel additives including methyl tert butyl ether (MtBE), and lead scavengers.

Sample ID	Sample Date	TPH- g	TPH- d	B	T	E	X	MtBE
		µg/L						
DW-6140	6/07/01	<50	<50	<1.0	<1.0	<1.0	<1.0	**52**
	9/13/01	<50	<50	<1.0	<1.0	<1.0	<1.0	**22**
	12/13/01	<50	<50	<0.5	<0.5	<0.5	<1.5	**15**
	5/20/02	<50	<50	<0.30	<0.30	<0.50	<0.50	**18**
	3/19/03	<50	<50	<1.0	<1.0	<1.0	<1.0	<1.0
	7/09/03	<50	<50	<1.0	<1.0	<1.0	<1.0	**4.0**
	9/18/03	<50	<50	<1.0	<1.0	<1.0	<1.0	**17**
	12/02/03	<50	<50	<1.0	<1.0	<1.0	<1.0	**4.8**
	3/31/04	<50	<50	<0.3	<0.3	<0.5	<0.5	**0.53**
	6/08/04	<50	<50	<0.3	<0.3	<0.5	<0.5	**7.9**
	9/07/04	<50	<50	<0.3	<0.3	<0.5	<0.5	**7.1**
	3/31/05	<50	<50	<0.3	<0.3	<0.5	<0.5	**0.58**
	6/27/05	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.50
	9/12/05	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.50

EVALUATION OF REMEDIAL OPTIONS

Approaches to address the groundwater impacted from MtBE in domestic well DW-6140 can be divided into two categories: ex-situ remediation (well head treatment) and new domestic well construction. The costs presented are based on initial estimates of project requirements.

Well Head Treatment

The first approach to remediate the impact to groundwater from MtBE is to construct a well head treatment system utilizing the existing domestic well. A simple system involving a sediment pre-filter and a series of two carbon tanks can be constructed to remove low levels of MtBE. However, if higher levels of MtBE are encountered or expected, another well head treatment system would need to be constructed. In this scenario, an air stripper would be placed inline followed by a series of two carbon tanks. The advantage of the treatment system involving the air stripper is the efficiency in which MtBE can be removed. The potential for "break through" with a carbon tank only system is much higher. A sampling schedule and carbon replacement program would be inherent with either system.

An installed carbon filtration system is estimated to cost about $5,300. If an air stripper is used in conjunction with the carbon tanks, the cost increases approximately $13,000 for an estimated total of $18,300. Additional costs include a protective enclosure ($1,600), monthly sampling ($430 per event: $280 for laboratory analysis for TPH as gasoline, BTEX, and oxygenated fuel additives, and $150 for 2 hours for a field technician). Costs for carbon replacement, sediment filter replacement, additional construction fees (i.e electrician, plumbing contractors) for proper system installation, and project coordination, observation, direction, and reporting of remedial activities are estimated to be $7,500. The total cost to address the impact to groundwater from MtBE starts at about $19,500 for a simple carbon filtration system and ranges upward toward approximately $31,500 for a treatment system involving the air stripper and carbon filtration. Bids for equipment have been attached in Appendix A.

Well Abandonment / New Well Construction

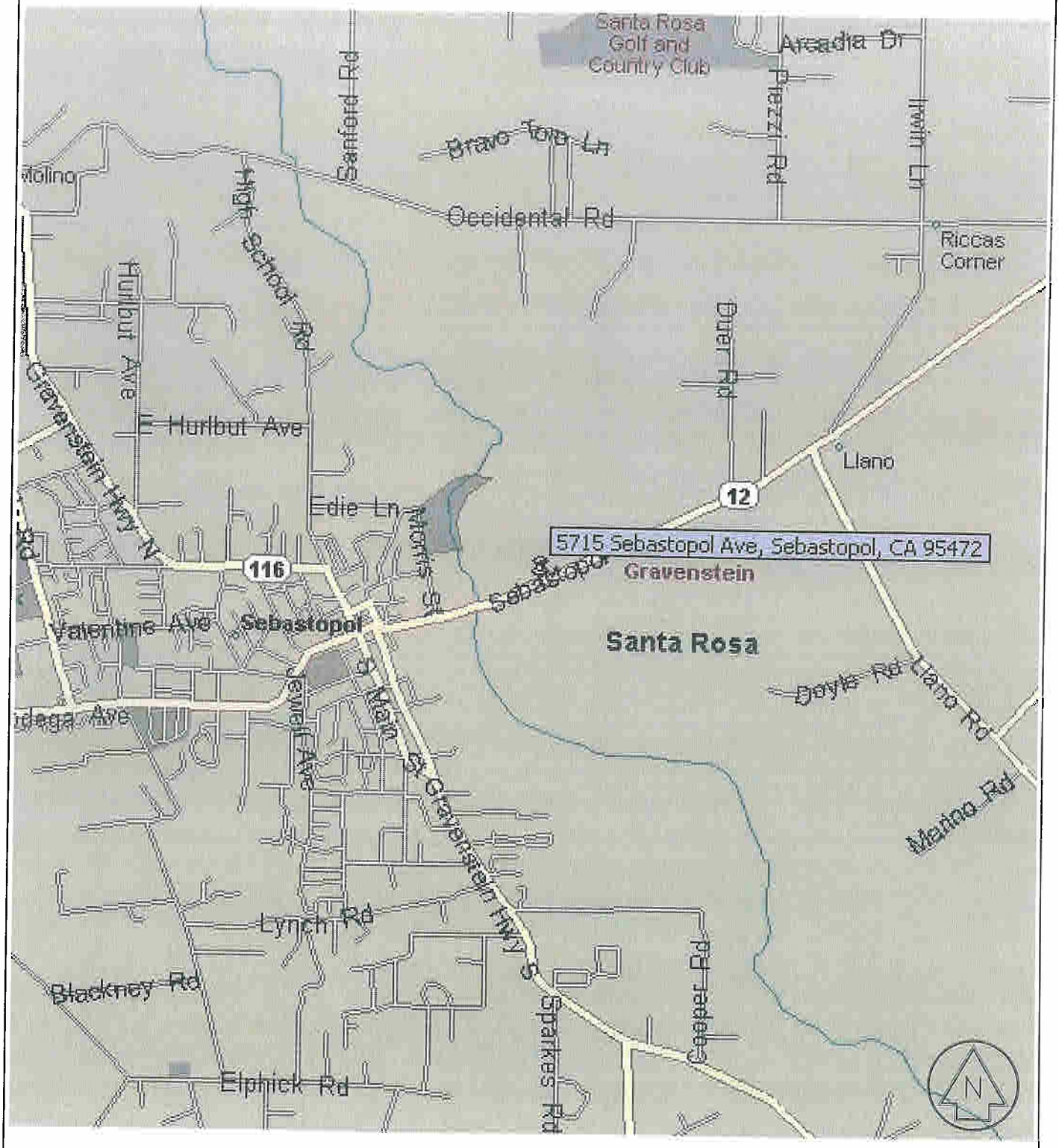
The second approach to address the impact to groundwater from MtBE is to abandon the existing domestic well under permit and direction from SCDHS-EHD representatives, and construct a new well that would sufficiently meet Sonoma County drinking water standards. During our July 2003 site investigation, MtBE was detected in the groundwater samples collected from CPT-1 at a concentration of 1,500 µg/L (refer to the December 24, 2003 *Report of Investigation* for complete details). Based upon lithologies logged with CPT technologies during the July 2003 site investigation, it appears that a water-bearing zone occurs in a sandy silt layer at approximately 41 to 48 feet bgs. It was also determined that no additional groundwater zones were located below 50 feet bgs to the total depth of 75.13 feet bgs. Therefore, a new domestic well constructed with an approximately 50 foot thick seal, an approximate depth of 200 feet bgs, and drilled in the presumed up-gradient direction should provide adequate protection from impact from MtBE and provide drinking water for the subject site. Cost estimates for the abandonment of the existing well, the construction of a new well, and 25% contingency is approximately $14,100. Bids have been attached in Appendix B.

Summary

We evaluated the technical and financial data judged to be most relevant to the subject feasibility study. The outlined costs of well head treatment versus well abandonment and domestic well installation are presented below.

Remedial Option		Approximate Cost
Well Head Treatment	Carbon Tank System	$19,500
	Air Stripper / Carbon Tank System	$31,500
Well Abandonment / New Construction		$14,100

Based upon the uncertainty of the integrity of the domestic well, the risk of increasing concentrations of MtBE as groundwater is pumped, projected costs, and what we consider to be prudent, it is our opinion that well abandonment and drilling a new well is the most viable and cost effective option. Therefore, we recommend that the existing well be abandoned under permit and a new well be constructed to provide drinking water.



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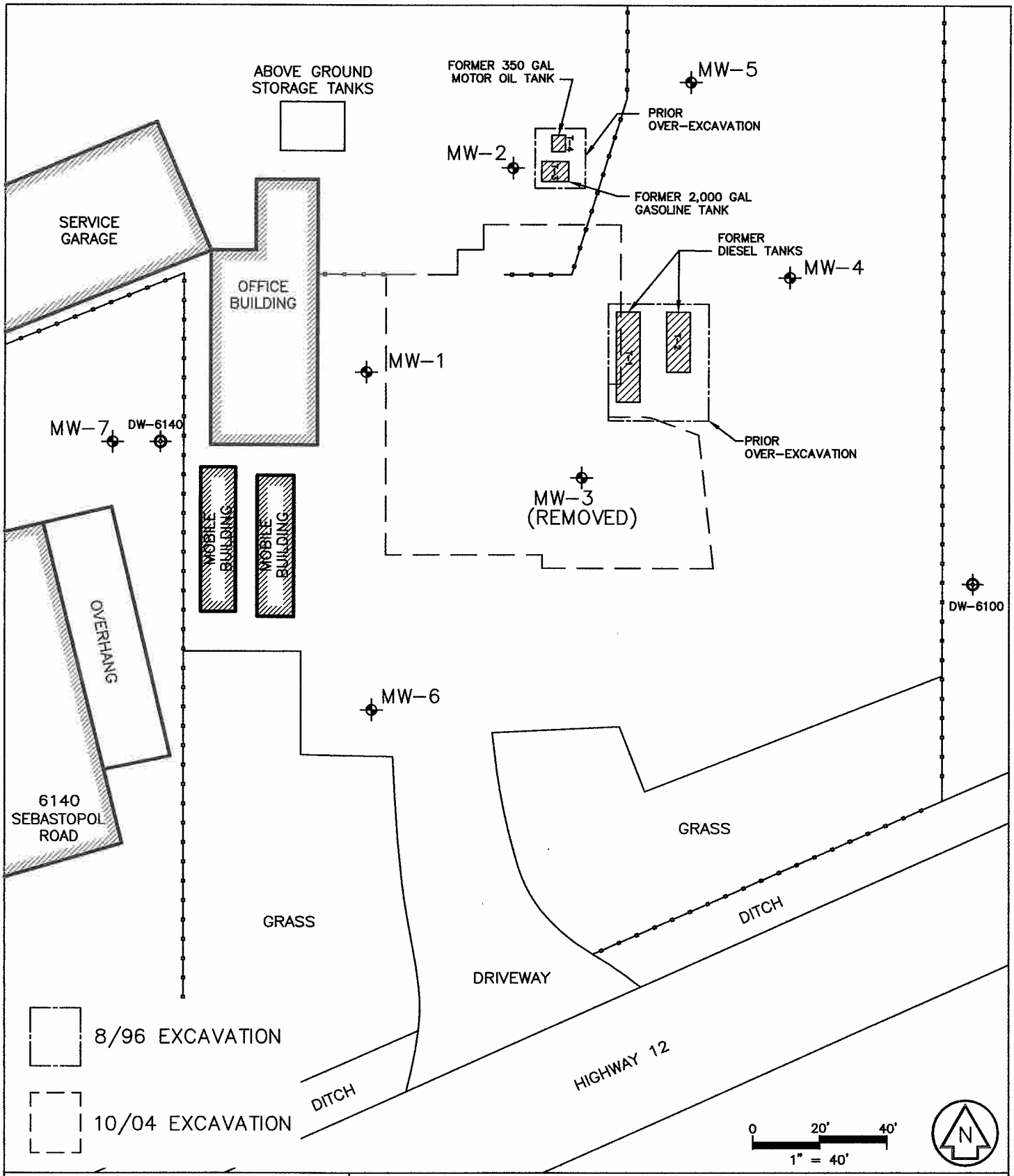
930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

SITE LOCATION MAP

PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA

PLATE: 1

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1301.01 SLM	BCW	1301.01	A-228		12/23/03



TRANS TECH CONSULTANTS
930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

SITE PLAN

PIPELINE EXCAVATORS
5715 SEBASTOPOL ROAD
SEBASTOPOL, CALIFORNIA

PLATE: 2

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1301.01 SP	BRH	1301.01	A-329		11/8/05

APPENDIX A

WEEKS Water Treatment
A Division of Weeks Drilling & Pump Co., Inc.

6100 Highway 12 / P.O. Box 176
Sebastopol, CA 95473
707-542-3272 Fax 707-823-4256
Contractors License C57-177681

DIAMOND CERTIFIED
Independently Rated Highest In Quality

Estimate & Contract

By: **Charlie Judson**
Date: **8/12/2005**

For: **Transtech Consultants**
ATTN: Brian Hasik
930 Shiloh Road Bldg. 44 Ste J
Windsor, CA

Site:

Quant.	Part Number	Description	Price	Amount
1	qwtCarbon14	Organic Chem Filtration 1465		
1	7.70000.105	Rubbermaid 52CuFt, 2 door		

Note:
All water treatment systems require regular monitoring and maintenance to ensure continued perfromance and those services are not included in this proposal.

Scope of Work:
1. Install carbon filtration system for drinking water in Rubbermaid enclosure.
2. See attached sheet for treatment system components.
3
4.

Excluded (see General Exclusions on Page Two):
1. This proposal is subject to our inspection and approval of site conditions as well as a review of water analysis.
2.

	Misc. Installation Materials	Included	
	Tax	Included	
	Installation Labor	Included	
	TOTAL		**$5,231.25**

This estimate will be billed: ☐ "Time and Materials" (Approximate) ☑ Flat bid (Not Approximate)

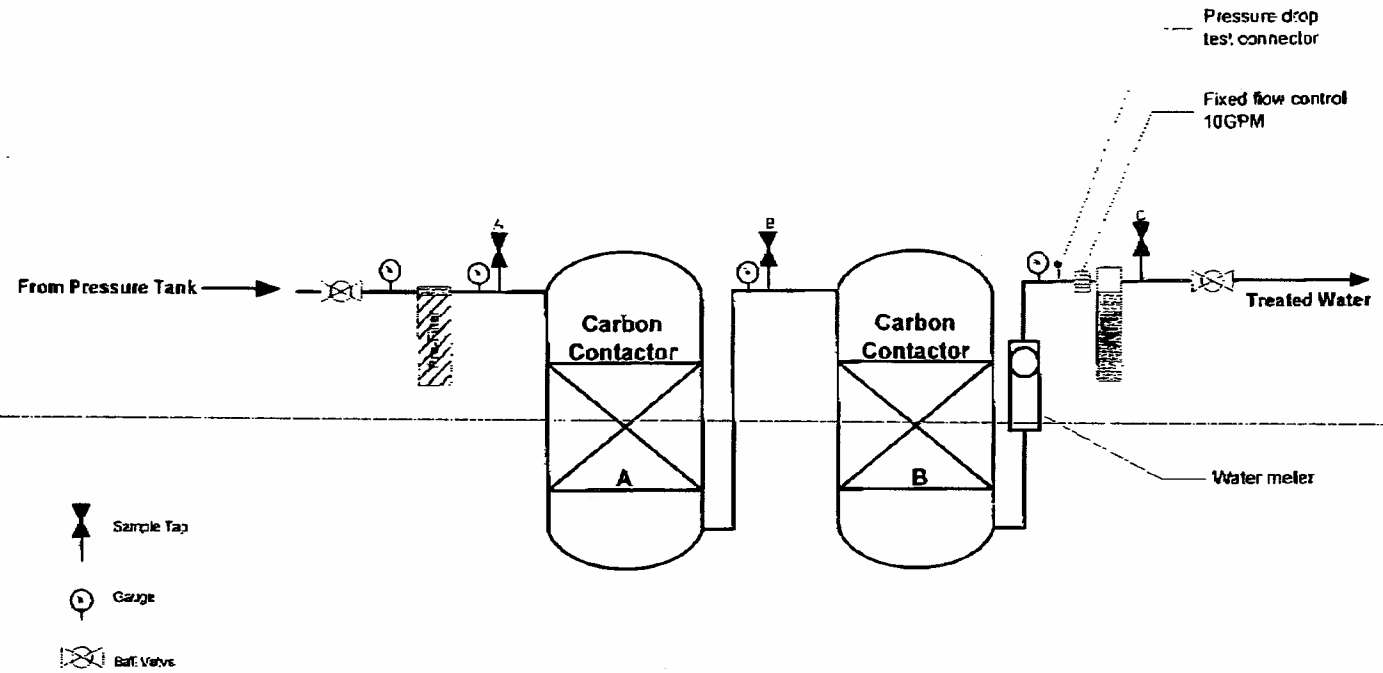
Weeks Drilling & Pump Company, Contractor or "we" or "us", proposes to furnish equipment, material, and labor in accordance with specifications above. The undersigned, Buyer, or "you" or "your", hereby accepts the proposal and authorizes the work to be performed, and acknowledges having read Page Two of this contract and having received a copy of the "Notice to Owner", attached .

"You, the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction. See the attached Notice of Cancellation form for an explanation of this right."

Buyer: (X)_____ **Date:** _____

Seller: _____ **Date:** _____
Weeks Drilling & Pump Co.

Work 575-8622
Home
Fax 837-7334



Standard Installation Configuration

Systems requiring more than 10 GPM to be configured individually

Component	# Required	Description	Model Size 4	Model Size 6
Ball Valve	2		3/4"	3/4"
Pre-Filter	1	5 Micron Cartridge	1.5"	1.5"
Sample Tap	3	Brass Valve w/ tube	1/4"	1/4"
Carbon Contactor	2	Fibreglass Tank w/ Activated Carbon	14"x65"	18"x65"
Activated Carb		Per Contactor	4 cu.ft	6 cu.ft.
UV Unit	1	Pura UV20	3/4"	3/4"
Gauge	3	Oil Filled 0-100 PSI	2.5"	2.5"
Water meter	1	Water meter, gals	3/4"	3/4"
Flow Control	1	Dole Flow Cntrl 10GPM	3/4"	3/4"
Piping	Varies	PVC Sched 40	3/4"	3/4"

WEEKS WATER TREATMENT
A Division of Weeks Drilling & Pump Co., Inc.

Wellhead AC Treatment

General configuration and equipment list

November 6, 2000	SIZE	FSCM NO	DWG NO	REV
Equipment Schematic	SCALE	None	SHEET	1

Estimate Q0805-29947

August 15, 2005

QED

To:	***Brian Hasik***	***Regional Contact:***	***Tom Judy***
	TransTech Consultants		***Regional Sales Manager***
	930 Shiloh Road	Tel:	530-887-0875
	Windsor, CA 95492	email:	tjudy@qedenv.com
	Tel: 707-575-8622		
	Fax: 707-837-7334	*Prepared by:*	*David Retholtz*
	email:	**Reference:**	**Pipe Line**

Item	Qty	Unit	Product Description / Part Number	Unit Price	Extended Price
1)	1	EA	EZ-2.4P STACKER AIR STRIPPER ASSEMBLY, 4 TRAY 1-25GPM MATERIAL: HDPE (Top cover, Trays, and Sump) INCLUDES: Top ring, top cover, polypropylene de-mister, 4 trays, sump, tension rod kit, PVC bulkhead fittings, sight tube/drain kit, and sump pressure gauge kit. Note: This price does not include the blower. *Please review air stripper performance model results for correct influent contaminants/concentrations and whether the estimated effluent concentrations will meet discharge requirements. QED cannot guarantee air stripper model accuracy for contaminant concentrations greater than 25% of maximum solubility concentration at the specified temperature.* EZ-2.4P	3,015.00	3,015.00
2)	1	EA	SKID, 32"W by 82"L Platform for QED EZ-2.xP Series Air Strippers. Material: C3 x 5.0# Welded steel construction with forklift access holes. Finish: PPG Pit Guard two part epoxy paint over an epoxy primer. Designed for QED's Air Stripper, Blower, (2) pumps, and control panel. 804039	1,695.00	1,695.00
3)	1	EA	BLOWER, Pressure / Mfg. Rotron Motor: 3.0hp, 208-230Volt, 1-Phase, TEFC Std. on a EZ-2.4P & EZ-2.6P *Assumes air discharge to atmosphere.* 805192	2,340.00	2,340.00
4)	1	EA	KIT, BLOWER PIPING 2" PVC SCH80 Includes: Pipe Fittings, Flex Hose & Flow relief valve. Design for EZ-2.4P & EZ-2.6P series Air Strippers. Blower to Sump piping kit for QED skid mounted systems. BLKIT2	350.00	350.00
5)	1	EA	PUMP, TRANSFER / Mfg. Goulds - NPE Series 30 GPM @ 50TDH, 1 HP 115/230V, 1 Phase, TEFC. Pump material: 316L / Viton Suction: 1-1/4" npt - Discharge: 1" npt *Air Stripper Feed Pump* T3050	630.00	630.00
6)	1	EA	KIT, FEED PUMP PLUMBING, 1-30GPM SYSTEM Design for QED skid mounted EZ-Stacker Air Strippers. Feed pump to Air Stripper. Includes: 2" Hose, Fittings, Pressure Guage, Check Valve, Ball Valve, and Sample Port. 1STIN-2	290.00	290.00

Estimate Q0805-29947

August 15, 2005

QED

To: ***Brian Haslk***
TransTech Consultants
930 Shiloh Road
Windsor, CA 95492
Tel: 707-575-8622
Fax: 707-837-7334
email:

Regional Contact: ***Tom Judy***
Regional Sales Manager
Tel: 530-887-0875
email: tjudy@qedenv.com

Prepared by: *David Retholtz*
Reference: **Pipe Line**

Item	Qty	Unit	Product Description / Part Number	Unit Price	Extended Price
7)	1	EA	PUMP, TRANSFER / Mfg. Goulds - NPE Series 30 GPM @ 50TDH, 1 HP 115/230V, 1 Phase, TEFC. Pump material: 316L / Viton Suction: 1-1/4" npt - Discharge: 1" npt *Air Stripper Discharge Pump* T3050	630.00	630.00
8)	1	EA	KIT, DISCHARGE PUMP PLUMBING, 1-30GPM SYSTEM Design for QED skid mounted EZ-2.xP & EZ-4.xP Air Strippers. AS sump and discharge pump. Includes: 1 1/4" Hose, Fittings, Pressure Gauge, Check Valve, Ball Valve, and Sample Port. 1STDS-2	250.00	250.00
9)	1	EA	KIT, Sump discharge pump float switch. Includes: (1) 800065 Warrick Float Switch & (1) Cord Strain Relief Note: Requires intrinsically-safe relay for explosive environments. QED p/n CPIS EZ-DIS	130.00	130.00
10)	1	EA	KIT, Sump High Level Float Switch. (non-EXP) Includes: (1) 800065 Warrick Float Switch & (1) Cord Strain Relief. Note: Requires intrinsically-safe relay for explosive environments. QED p/n CPIS EZ-HIGHLV	130.00	130.00
11)	1	EA	KIT, Blower Low Air Pressure Sump Switch (Explosion-Proof) Includes: (1) EZPLOW Pressure Switch, Tubing & Fittings. EZ-LOWP	190.00	190.00
12)	1	EA	CONTROL PANEL STANDARD DESIGN: Control panel is weatherproof (UL, NEMA 4 rating), with air stripper blower motor starter, HOA switch, green running light, red stripper sump high level alarm light, red low air pressure alarm light, circuit breakers and relays for controlling stripper and main disconnect. Unless otherwise indicated in this quote, the QED panel will control only the equip listed in this quote. NOTE: If site is Class I Division I or II, the control panel must be remote mount. SCPAS	2,072.00	2,072.00
13)	2	EA	Additional motor control: Motor control includes contactor, overload relay, control relays, fuses, HOA switch, and green running light. *Motor starter for (1) feed and (1) discharge pump.* CPMOTOR	399.00	798.00
14)	1	EA	LABOR, Assembly of QED Skid mounted Air Stripper systems. Std. on EZ-2.xP, EZ-4.xP systems. EZ-L1	195.00	195.00

Estimate Q0805-29947

August 15, 2005

QED

To: ***Brian Hasik***
TransTech Consultants
930 Shiloh Road
Windsor, CA 95492
Tel: 707-575-8622
Fax: 707-837-7334
email:

Regional Contact: ***Tom Judy***
Regional Sales Manager
Tel: 530-887-0875
email: tjudy@qedenv.com

Prepared by: *David Retholtz*
Reference: **Pipe Line**

Item	Qty	Unit	Product Description / Part Number	Unit Price	Extended Price
			ESTIMATE Total		**12,715.00**
			Optional Item(s)		
15)	1	EA	(1) SPARE TRAY FOR AN EZ-2.xP Stacker Pricing is per tray and includes the gasket. Please order 4 or 6 for a complete set. *A convenience feature for cleaning. Replace fouled trays with clean trays and bring the fouled trays back to the office so they can be cleaned at a more convenient time. Cost is for 1 tray--customer must specify how many trays are requested.* EZ-T2P	440.00	440.00
16)	1	EA	RING, BOTTOM HOLD-DOWN, EZ-2.xP Series Stacker Air Stripper Contractor version. (p/n CP2BR) *Required only if stripper is not skid mounted by QED.* 804041	220.00	220.00

Quotation assumes a non-explosive environment. Quotation assumes 230V/1phase/60Hz power. Contact QED for revised pricing in the event of voltage/phase changes.

Terms & Conditions:

A purchase order with a 30% deposit required upon placing order. Balance plus shipping is due within 30 days of shipping. Prices do not include freight: FOB Factory. Orders requested not to be shipped within two weeks after completion are subject to QED's standard storage rates. Orders not shipped when completed per customer's request are invoiced at time of completion. Prices do not include state or local taxes, where applicable. Past due invoices are subject to a 1-1/2% service charge per month. Normal shipment is 4-8 weeks from QED's receipt of customer signed Approval Package 1 and acceptance of order. After seller accepts, NO order may be canceled without Seller's written consent. Cancellation, if approved, is subject to reasonable restocking and/or handling fee. All products will be returned freight prepaid to Seller's facility. Two (2) O & M manuals included with each system, additional manuals available for a charge. All systems shipped pre-assembled and factory tested. Quote is valid for 30 days from date of quotation. All prices are in U.S. Dollars. PRICES ARE BASED ON THE PURCHASE OF ALL ITEMS QUOTED. VERIFY PRICING ON COMPONENT ONLY PURCHASES.

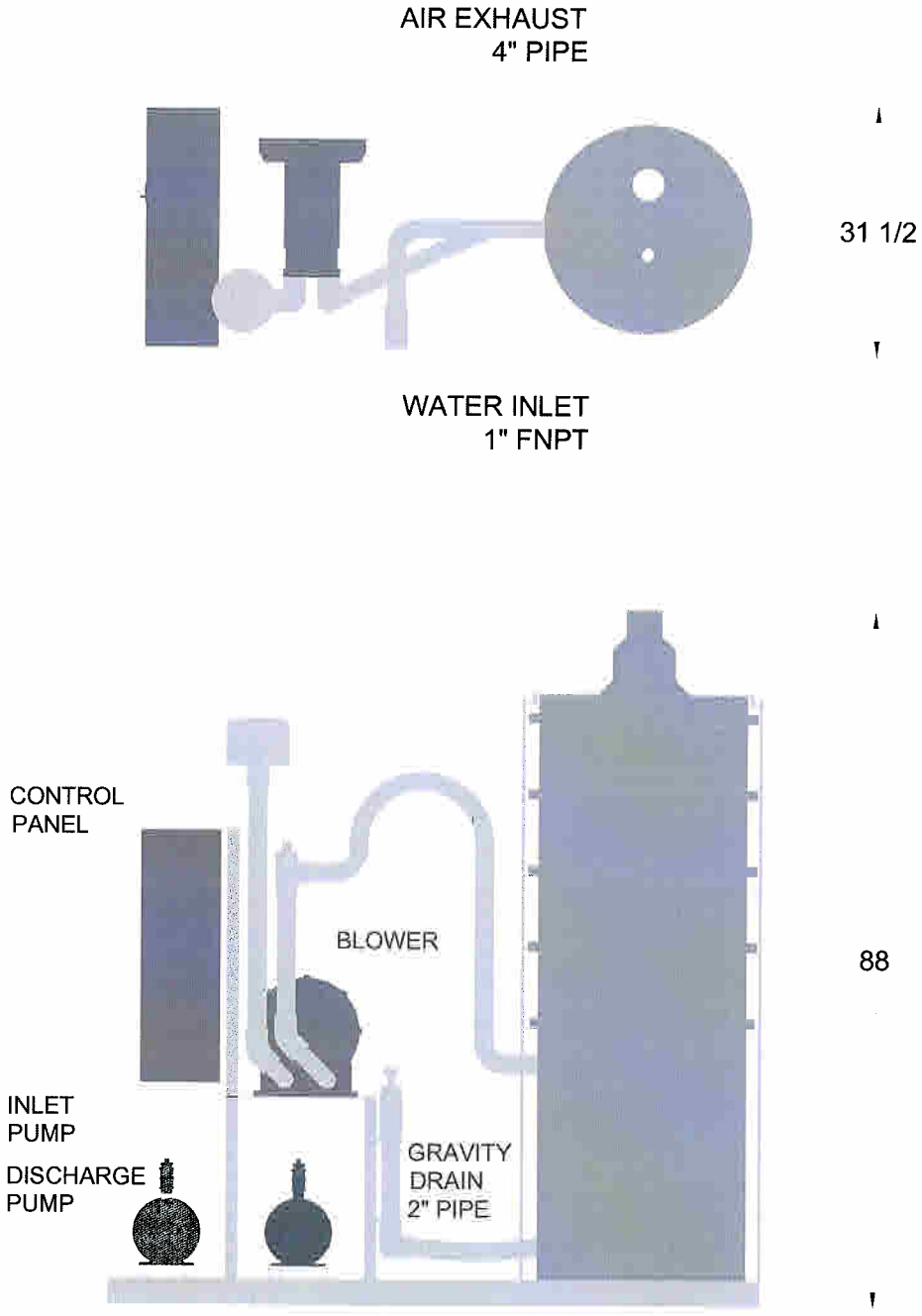
Accepted by: _____ Title: _____

Print Name: _____ Company: _____

PO Number: _____ Date: _____

Total Amount as Quoted: $ 12,715.00

QED EZ-Stacker Model 2.4P



Storage Buildings

Size	Ranch or Barn	Tall Ranch or Lean-To	Tall Barn
6' x 6'	$ 1,300	$ 1,480	$ 1,675
6' x 8'	1,460	1,620	1,800
6' x 10'	1,620	1,905	2,020
6' x 12'	1,790	2,025	2,245
8' x 8'	1,620	1,905	2,100
8' x 10'	1,860	2,135	2,265
8' x 12'	2,075	2,445	2,575
8' x 14'	2,265	2,615	2,785
8' x 16'	2,515	2,855	2,995
10' x 10'	2,200	2,540	2,680
10' x 12'	2,515	2,815	2,995
Sales tax not included in above prices.			
10' x 14'	2,885	3,260	3,400
10' x 16'	3,080	3,505	3,705
10' x 20'	3,670	4,045	4,330
12' x 12'	3,080	3,505	3,710
12' x 16'	3,735	4,120	4,355
12' x 20'	4,355	4,795	5,040
12' x 24'	4,935	5,450	5,690
12' x 28'	5,615	6,025	6,515
12' x 32'	6,235	6,720	7,050

All applicable taxes included in above prices.

Financing Available
(W.A.C.)

Please Note: Custom sizes also available. All TUFF SHED garages are subject to local building codes. Price based on level lot and does not include paint, windows, engineering fees, or cost of building permit. Concrete and overhead doors are subcontracted to qualified installers. Some items shown in photos are options. Some models not available in all areas. Prices subject to change without notice.

Engineered plans may be required for permit application, and are not included in above prices. Charges are relative to style and size of building. Ask your salesperson for details.

TS7/TG9 180 6/05

Garages

Size	Ranch	Tall Barn
14' x 20'	$ 10,995	$15,805
14' x 24'	13,065	18,970
16' x 20'	11,815	18,070
16' x 24'	14,130	21,685
18' x 20'	13,260	22,230
18' x 24'	15,875	26,670
20' x 20'	13,985	24,695
20' x 24'	16,810	29,630
22' x 20'	16,045	27,170
22' x 24'	18,410	32,595
24' x 24'	20,120	35,555
24' x 30'	25,215	44,455

Prices include all applicable taxes.

Accessories

Paint
25 colors available
(All storage buildings are priced unpainted)*

Windows (White Finish)
2' x 2' – $132; 3' x 2' – $165
3' x 3' – $193; 4' x 3' – $220

Shelves (1/2" Plywood)
12"-16" wide – $4.15 per linear ft.
24" wide – $5.25 per linear ft.

WorkBench (3/4" Plywood)
24" – $7 per linear ft.

Vents
Wall – 2 for $34
Turbine – $94

Loft
$4.15 sq. ft. & up

Skylights
2' x 2' – $138; 2' x 4' - $200

Pegboard
4' x 8' x 1/4" tempered – $2.20 sq. ft.

Ramps
7" x 36" Diamond Steel Plate – $33

Doors
Standard 4' – $175

Doors (in lieu of standard door)
Double 6' – $150; 8' – $150
Drip Cap Over Door:
4' – $35; 6' – $50; 8' – $60
Steel – $250
Roll-Up Canister Door:
$250 and up

Earth Anchors
MR88 – $70 each

Site Leveling
$100 minimum

Ask sales consultant about additional site leveling.

Approximate Building Heights

Width	Ranch	Tall Ranch	Barn	Tall Barn	Lean-To
6'	8' 3"	9' 3"	7'7"	10'0"	8'4"
8'	8' 7"	9' 7"	8'7"	11'0"	8'8"
10'	8'11"	9'11"	9'7"	12'0"	9'0"
12'	9' 3"	10' 3"	10'7"	13'0"	9'2"

APPENDIX B

WEEKS
Drilling & Pump Company

Water Well Drilling Proposal

Weeks Drilling & Pump Co.
P.O. Box 176, 6100 Highway 12
Sebastopol, CA 95473
(707) 542-3272 Fax (707) 823-4258

Weeks Drilling & Pump Co.
3460 North State Street
Ukiah, CA 95482
(707) 462-9080 Fax (707) 462-0175

Weeks Drilling & Pump Co., a California corporation, contractor's license number 177681, proposes to construct a water well(s) for:

Property Owner	C/O Trans Tech Consultant	Home Phone	
Mailing Address	930 Shiloh Rd. Bldg.44 Ste. J	Work Phone	575-8622
	Windsor, CA 95492	Fax Phone	837-7334
		Cell Phone	
Well Location	Sebastopol Rd. Sebastopol		
APN			

We propose to construct a water well to an approximate depth of **200** feet and set approximately **200** feet of **5" PVC** casing. Costs may include:

Item			Approx. Quantity	
Non-rock drilling	$ 23.00	per foot	200	feet
Rock, boulder, or conglomerate drilling	$	per foot		feet
Reaming - non-rock conditions	$	per foot		feet
Reaming – rock, boulder or conglomerate conditions	$	per foot		feet
Casing, blank, installed	$ 10.00	per foot	100	feet
Casing, perforated, installed	$ 14.00	per foot	100	feet
Sand/gravel, delivered		Vendor invoice +20%	Sand 3	yards
Sanitary Seal	$ 500.00	installed	50'	
Permit	$ 575.00		1	
Move-in / Move-out fee	$ 350.00		1	

The approximate cost of the proposed well is **$9593**, more or less, depending on conditions encountered.

This is a proposal and not a substitute for a drilling contract as required by California Law. Other than unit prices listed above, we do not make any representations by this proposal. If we can serve you with your water needs, please **FILL OUT AND RETURN** this form **OR CALL OUR OFFICE** with the needed information **(AP #, PHONE NUMBERS and PARCEL MAPS)** and we will then prepare a contract that contains the details of our agreement with you. ***Thank you for thinking of Weeks!***

Signed _____ This proposal is made on _____, 200___

Accepted by customer _____ Date _____

Document2

WEEKS DRILLING & PUMP CO.
6100 Highway 12 / P.O. Box 176
Sebastopol, CA 95473
707-542-3272 Fax 707-823-4258
Contractors License C57-177681

DIAMOND CERTIFIED
Independently Rated Highest in Quality

Estimate & Contract

By: Doug Pulley
Date: 8/15/2005

For: Trans Tech Consultant
930 Shiloh Rd. Bldg 44 Ste. J
Windsor, CA 95492

Site: Auction Yard on Sebastopol Rd. Scb.

Quant.	Part Number	Description	Price	Amount
1		Abandon 6" X 60' Steel Cased Well		

Scope of Work:
1.Pull pump
2.Perforate casing bottom to top
3.Excavate around well 5' below grade and cut casing off
4.Cement bottom to top, contain fluids in drums

Excluded (see General Exclusions on Page Two):
1.Permit (can be completed on new well permit if done within 30 days of new well)
2.Disposal of pump equipment.

		Misc. Installation Materials	Included	
		Tax	Included	
		Installation Labor	Included	
		TOTAL		**$2,400.00**

This estimate will be billed: ☐ "Time and Materials" (Approximate) ☑ Flat bid (Not Approximate)

Weeks Drilling & Pump Company, Contractor or "we" or "us", proposes to furnish equipment, material, and labor in accordance with specifications above. The undersigned, Buyer, or "you" or "your", hereby accepts the proposal and authorizes the work to be performed, and acknowledges having read Page Two of this contract and having received a copy of the "Notice to Owner", attached .

"You, the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction. See the attached Notice of Cancellation form for an explanation of this right."

Buyer: (X) _____ **Date:** _____

Seller: _____ **Date:** _____
Weeks Drilling & Pump Co.

Work 575-8622
Home
Fax 837-7334

IRRIGATION • DOMESTIC • INDUSTRIAL
575-8622
837-7334 fax

COMPLETE PUMP SERVICE

LES PETERSEN
DRILLING & PUMP INC.
ESTABLISHED SINCE 1946

5434 OLD REDWOOD HWY. NORTH
SANTA ROSA, CALIF. 95403
(707) 545-0246-Ph
(707) 573-9483-Fx

August 4, 2005

Trans Tech Consultants
C/O Brian Hasik
930 Shiloh Rd., Bldg. 44, Suite J
Windsor Ca, 95492

RE: 6140 Sebastopol Road well abandonment

The following is our estimate to abandon the well at 6140 Sebastopol Road as outlined below:

1. File for a well abandonment permit with the county.
2. Remove the pump from the well if one exists.
3. Perforate the top 33' of the well casing.
4. Fill the well from the bottom to 33' with pea gravel.
5. Fill the well from 33' to 3' with hole plug.
6. Fill the well from 3' to 0' with concrete.

Total **$ 1,200.00**

Excluding:

(a) Removing above ground equipment if any exists.
(b) Removing building if one exists.
(c) Excavation around well casing if casing is to be cut off below grade.

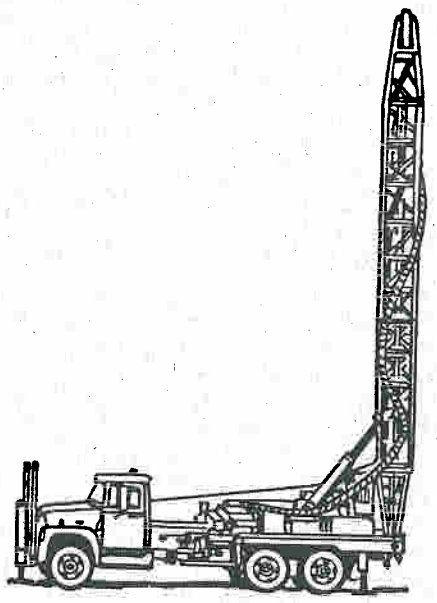
Note: The above is based on the well being 6" in diameter and 60' deep.

Please let me know if you would like us to proceed.

Sincerely,

Rich Richardson
Les Petersen Drilling & Pump, Inc.

Estimate valid for 30 days



PROPOSAL

State Contractor's License No. 261084

LES PETERSEN
DRILLING & PUMP INC.
ESTABLISHED SINCE 1946

IRRIGATION • DOMESTIC • INDUSTRIAL
COMPLETE PUMP SERVICE

5434 OLD REDWOOD HWY.
SANTA ROSA, CA. 95403
(707) 545-0246 OFFICE
(707) 573-9483 FAX

ATTN BRIAN HASIK

PROPOSAL SUBMITTED TO: TRANS TECH	PHONE: 575-8622	DATE: 8-3-25
STREET: 730 Shiloh Rd Bldg 40 Ste. J	JOB NAME:	
CITY, STATE, ZIP CODE: Windsor CA. 95492	JOB LOCATION: 5715 Shiloh Rd	JOB PHONE:
WE HEREBY SUBMIT SPECIFICATIONS AND ESTIMATES FOR:		A.P.#:

Quantity		Description		Cost		Total Cost
200	Feet	Drilling	@ $ 29.00	Per Foot	$	5800.00
N/A	Feet	Reaming	@ $ —	Per Foot	$	—
100	Feet	5" #f480 PVC Blank Well Casing	@ $ 6.00	Per Foot	$	600.00
100	Feet	5" #f480 PVC Well Screen	@ $ 9.00	Per Foot	$	900.00
2	Each	5" PVC Caps	@ $ 22.00	Each	$	44.00
3	Sets	Casing Centralizers	@ $ 35.00	Per Set	$	105.00
4	Yards	Well Pack MONTERY SAND	@ $ 220.00	Per Yard	$	880.00
50	Foot	Surface Seal	@ $ 400.00	Each	$	400.00
3	Hours	Air Jetting and Development	@ $ 185.00	Per Hour	$	555.00
1	Each	Well Permit	@ $ 535.00	Each	$	535.00
		Sales Tax on Material			$	226.99
		Total Installed Estimate of well based on	200'		$	10,645.99

NOTE:

A. **The above is an estimate only, total price will be adjusted plus or minus according to the above unit price upon completion.**
B. **All drilling spoils and development water shall be disposed on site.**
C. **If extra-hard rock is encountered or other underground hazards in drilling, Operator at his option may cease drilling. Owners to pay for footage drilled, or continue at Owner's option on the time-and material basis.**

ADDITIONAL NOTES:

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance Our workers are fully covered by Workmen's Compensation Insurance.

AUTHORIZED SIGNATURE..... Roy Peterson

(SEE REVERSE SIDE FOR TERMS AND CONDITIONS)

Acceptance of Proposal -

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Date of Acceptance.....

SIGNATURE.....

SIGNATURE.....

*Sign and return **ORIGINAL - COPY** provided for your records.*